IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

Atty. Docket No.: 000479.00124

Brian Keith LONG

Serial No.: 10/824,249 Group Art Unit: 3641

Filed: April 13, 2004 Examiner: Weber, Jonathan C.

For: MODULAR STRUCTURE Confirmation No.: 5753

APPEAL BRIEF

U.S. Patent and Trademark Office Customer Service Window Mail Stop - Appeal Randolph Building 401 Dulany Street Alexandria, VA 22314

Sir:

This is an Appeal Brief filed in support of Appellants' September 28, 2009, Notice of Appeal. Appeal is taken from the Final Office Action mailed May 27, 2009 (hereafter, "Final Office Action").

Please charge any fees to Deposit Account No. 19-0733. In addition, any extensions of time necessary for acceptance or entry of this paper are hereby requested.

Brian Keith LONG Serial No. 10/824,249 Appeal Brief

REAL PARTY IN INTEREST

37 C.F.R. § 41.37(c)(1)(i)

The owner of this application, and the real party in interest, is Science Applications International Corporation.

RELATED APPEALS AND INTERFERENCES

37 C.F.R. § 41.37(c)(1)(ii)

There are no related appeals or interferences.

STATUS OF CLAIMS

37 C.F.R. § 41.37(c)(1)(iii)

Claims 38-42, 44-49, 52-61, 64-71, 74, and 76-87 stand rejected and are presently appealed.

Claims 1-37, 43, 50, 51, 62, 63, 72, 73, and 75 have been cancelled.

STATUS OF AMENDMENTS

37 C.F.R. § 41.37(c)(1)(iv)

No amendments have been made subsequent to final rejection.

SUMMARY OF CLAIMED SUBJECT MATTER

37 C.F.R. § 41.37(c)(1)(v)

In making reference herein to various embodiments in the specification text and/or drawings to explain the claimed invention, Appellants do not intend to limit the claims to those embodiments; all references to the specification and drawings are illustrative unless otherwise explicitly stated. Appellants refer to the originally filed Specification dated April 13, 2004 ("Specification"), for the cited support.

Independent claim 38 is directed to a modular structure for receiving and transporting individuals or equipment. Specification, p. 1, para. [01], ll. 1-3, para. [03], ll. 1-3, p.2, para. [05], ll. 9-11, p. 6, para. [34], ll. 1-4, p. 9, para. [42], ll. 5-6, p. 11, para. [46], l. 1, FIGS. 1-5H (element 10). The modular structure includes a frame formed from a plurality of frame portions. *Id.* at p. 2, para. [03], ll. 6-9, p. 6, para. [35], ll. 1-10, para. [36], ll. 1-7, p. 7, para. [37], ll. 1-11, para. [39], ll. 1-9, FIGS. 1-5H (elements 12, 22, 32, 42). The modular structure further includes

a shell formed from a plurality of abutting armored panels and each of the abutting armored panels formed of a single piece and forming at least a portion of the interior and exterior surface of the modular structure. *Id.* at p. 1, para. [03], 11. 3-4, p. 5, para. [33], 11. 3-4, p. 6, para. [34], 11. 1-6, p. 11, para. [45], Il. 1-2, p. 7, para. [37], Il. 1-4, FIGS. 1-5H, 6 (elements 11, 21). Each of the frame portions is secured to at least one of the armored panels to form discrete units, the units being arranged to form the modular structure in a first configuration, the first configuration including a central unit and a plurality of outer units. Id. at p. 6, para. [35], Il. 1-5, para. [36], Il. 1-7, p. 7, para. [37], Il. 1-11, p. 10, para. [44], Il. 12-15 FIGS. 5A-5H, 10 (element 10). The outer units are removably connected to the central unit and protrude from the central unit and at least two of the outer units are substantially perpendicular to each other. Id. p. 2, para. [03], ll. 1-3, para. [05], Il. 5-9, p. 6, para. [36], Il. 1-7, p. 7, para. [39], Il. 4-7, p. 13, para, [52], Il. 6-9, 11-13, para. [53], Il. 1-5, FIG. 10 (element 10). The central and outer units are non-destructively separable to disassemble the modular structure. Id. p. 2, para. [05], 11. 5-9, p. 6, para. [36], 11. 2-7, p. 12, para. [50], Il. 1-3. The units are configured and aligned to be interchangeable with units from other modular structures in at least a second configuration, wherein the first configuration is different from the second configuration. Id. p. 15, para. [55], Il. 10-13, FIGS. 10-12 (element 10).

Independent claim 52 is directed to a modular structure for receiving and transporting individuals or equipment. Specification, p. 1, para. [01], ll. 1-3, para. [03], ll. 1-3, p.2, para. [05], ll. 9-11, p. 6, para. [34], ll. 1-4, p. 9, para. [42], ll. 5-6, p. 11, para. [46], l. 1, FIGS. 1-5H (element 10). The modular structure includes a frame formed from a plurality of tubular frame portions, wherein the tubular frame portions are discrete and separable. *Id.* at p. 2, para. [03], ll. 6-9, p. 6, para. [35], ll. 1-10, para. [36], ll. 1-7, p. 7, para. [37], ll. 1-11, para. [39], ll. 1-9, FIGS. 1-5H (elements 12, 22, 32, 42). The modular structure further includes a shell formed from a plurality of abutting armored panels. *Id.* at p. 1, para. [03], ll. 3-4, p. 5, para. [33], ll. 3-4, p. 6, para. [34], ll. 1-6, p. 11, para. [45], ll. 1-2, FIGS. 1-5H (elements 11, 21). The frame and shell are configured to form an elongate shape with a first end area and an opposite second end area. *Id.* at p. 5, para. [33], ll. 1-2, 4-8, FIGS. 1-4, 5H, 6 (element 10). Each of the abutting armored panels is formed of a single piece and forms at least a portion of an interior surface of the modular structure and an exterior surface of the modular structure, having no void between the

interior surface and exterior surface. *Id.* at p. 6, para. [34], Il. 1-2, p. 7, para. [37], Il. 1-4, FIGS. 1, 5A-5H, 6 (elements 21, 41). Each of the frame portions is secured to at least one of the armored panels to form discrete units and the units are arranged to form the modular structure. *Id.* at p. 6, para. [35], Il. 1-5, para. [36], Il. 1-7, p. 7, para. [37], Il. 1-11, p. 10, para. [44], Il. 12-15 FIGS. 5A-5H (elements 10, 20). The modular structure further includes a first unit and a plurality of second units, the second units being removably connected to the first unit and protruding from the first unit. *Id.* at p. 13, para. [52], Il. 6-13, FIGS. 10-12 (element 10). The modular structure may further include at least two of the second units being substantially perpendicular to each other. FIG. 10 (element 10). The modular structure further includes the first and second units being configured to be separated to disassemble the modular structure. Specification, p. 1, para. [03], Il. 2-4, p. 14, para. [55], Il. 11-16. The modular structure further includes at least one of the units having a hinged configuration to form an entry point of the modular structure, the entry point forming an opening in the modular structure that encompasses substantially all of the first end area. *Id.* p. 9, para. [42], Il. 6-12, p. 10, para. [44], Il. 16-17.

Independent claim 74 is directed to a modular structure for receiving and transporting individuals or equipment. Specification, p. 1, para. [01], Il. 1-3, para. [03], Il. 1-3, p.2, para. [05], 11. 9-11, p. 6, para. [34], 11. 1-4, p. 9, para. [42], 11. 5-6, p. 11, para. [46], 1. 1, FIGS. 1-5H (element 10). The modular structure includes a first frame formed from a plurality of frame portions. Id. at p. 2, para. [03], Il. 6-9, p. 6, para. [35], Il. 1-10, para. [36], Il. 1-7, p. 7, para. [37], 11. 1-11, para. [39], 11. 1-9, FIGS. 1-5H (elements 12, 22, 32, 42). The modular structure further includes a first shell formed from a plurality of armored panels. Id. at p. 1, para. [03], 11. 3-4, p. 5, para. [33], Il. 3-4, p. 6, para. [34], Il. 1-6, p. 11, para. [45], Il. 1-2, FIGS. 1-5H (elements 11, 21). The first frame of the modular structure extends around the exterior of the first shell. *Id.* p. 6, para. [35], 11. 1-8, FIGS. 1-14 (element 12, 22, 32, 42). The first shell forms a first modular section having a bottom surface, a top surface and at least three sides. Id. p. 5, para. [33], ll. 1-6, FIGS. 1, 5H, 6, 10-14 (elements 10, 11, 21). Each of the armored panels of the first shell of the modular structure are formed of a single panel forming the first shell and forming at least a portion of the interior surface and exterior surface of the first modular section having no void between the interior surface and exterior surface. Id. at p. 6, para. [34], ll. 1-2, p. 7, para. [37], ll. 1-4, FIGS. 1, 5A-5H, 6 (elements 21, 41). The first modular section includes a center unit. FIG.

10 (element 10). The modular structure further includes first coupling means arranged on the first modular section and configured for joining the first modular section with at least one other modular section. *Id.* p. 8, para. [39], Il. 3-12, p. 9, para. [42], Il. 1-5, p. 10, para. [43], Il. 1-6, p. 13, para. [53], Il. 1-8, FIGS. 10-12 (element 10). This constitutes a means plus function limitation and supporting structure may be found at least at p. 8, para. [39], Il. 4-12, p. 9, para. [42], Il. 1-5, 11-12, p. 10, para. [43], Il. 1-6, p. 13, para. [53], Il. 1-8.

The modular structure further includes a second frame formed from a plurality of frame portions. Id. at p. 2, para. [03], Il. 6-9, p. 6, para. [35], Il. 1-10, para. [36], Il. 1-7, p. 7, para. [37], II. 1-11, para. [39], II. 1-9, FIGS. 1-5H (elements 12, 22, 32, 42). The modular structure further includes a second shell formed from a plurality of armored panels. Id. at p. 1, para. [03], 11. 3-4, p. 5, para. [33], Il. 3-4, p. 6, para. [34], Il. 1-6, p. 11, para. [45], Il. 1-2, FIGS. 1-5H (elements 11, 21). The second frame of the modular structure extends around the exterior of the second shell. Id. p. 6, para. [35], 11. 1-8, FIGS. 1-14 (elements 12, 22, 32, 42). The second shell forms a second modular section having a bottom surface, a top surface and at least three sides. Id. p. 5, para. [33], Il. 1-6, FIGS. 1, 5H, 6, 10-14 (elements 10, 11, 21). Each of the armored panels are formed of a single panel forming the second shell and forming at least a portion of the interior and exterior surface of the second modular section having no void between the interior surface and the exterior surface. Id. at p. 6, para. [34], Il. 1-2, p. 7, para. [37], Il. 1-4, FIGS. 1, 5A-5H, 6 (elements 21, 41). The modular structure further includes second coupling means arranged on the second modular section and configured for joining the second modular section to at least the first modular section. *Id.* p. 8, para. [39], Il. 3-12, p. 9, para. [42], Il. 1-5, p. 10, para. [43], Il. 1-6, p. 13, para. [53], Il. 1-8, FIGS. 10-12 (element 10). This constitutes a means plus function limitation and supporting structure may be found at least at p. 8, para. [39], Il. 4-12, p. 9, para. [42], Il. 1-5, 11-12, p. 10, para. [43], Il. 1-6, p. 13, para. [53], Il. 1-8.

The modular structure further includes a third frame formed from a plurality of frame portions. *Id.* at p. 2, para. [03], ll. 6-9, p. 6, para. [35], ll. 1-10, para. [36], ll. 1-7, p. 7, para. [37], ll. 1-11, para. [39], ll. 1-9, FIGS. 1-5H (elements 12, 22, 32, 42). The modular structure further includes a third shell formed from a plurality of armored panels. *Id.* at p. 1, para. [03], ll. 3-4, p. 5, para. [33], ll. 3-4, p. 6, para. [34], ll. 1-6, p. 11, para. [45], ll. 1-2, FIGS. 1-5H (elements 11, 21). The third frame of the modular structure extends around the exterior of the third shell. *Id.* p.

6, para. [35], Il. 1-8, FIGS. 1-14 (elements 12, 22, 32, 42). The third shell forms a third modular section having a bottom surface, a top surface and at least three sides. Id. p. 5, para. [33], ll. 1-6, FIGS. 1, 5H, 6, 10-14 (elements 10, 11, 21). Each of the armored panels are formed of a single panel forming the first shell and forming at least a portion of the interior surface and exterior surface of the first modular section having no void between the interior surface and exterior surface. Id. at p. 6, para. [34], Il. 1-2, p. 7, para. [37], Il. 1-4, FIGS. 1, 5A-5H, 6 (elements 21, 41). The modular structure further includes third coupling means arranged on the third modular section and configured for joining the third modular section with at least one other modular section. Id. p. 8, para. [39], ll. 3-12, p. 9, para. [42], ll. 1-5, p. 10, para. [43], ll. 1-6, p. 13, para. [53], Il. 1-8, FIGS. 10-12 (element 10). This constitutes a means plus function limitation and supporting structure may be found at least at p. 8, para. [39], II. 4-12, p. 9, para. [42], II. 1-5, 11-12, p. 10, para. [43], Il. 1-6, p. 13, para. [53], Il. 1-8. The second and third modular sections of the modular structure are removably connected to the center unit and protrude outward from the center unit and the second and third sections being substantially perpendicular to each other. Id. p. 2, para. [03], Il. 1-3, para. [05], Il. 5-9, p. 6, para. [36], Il. 1-7, p. 7, para. [39], Il. 4-7, p. 13, para, [52], Il. 6-9, 11-13, para. [53], Il. 1-5, FIG. 10 (element 10).

GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

37 C.F.R. § 41.37(c)(1)(vi)

Claims 38, 39, 42, 46-49, 52, 53, 56, 57, 60, 61, 65, 66, 69-71, 74, and 76-87 stand rejected under 35 USC § 102(b) as being anticipated by U.S. Patent No. 4,872,625 to Filley (hereinafter "Filley").

Claims 40, 41, 54, 55, and 64 stand rejected under 35 USC § 103(a) as being unpatentable over Filley in view of U.S. Patent No. 7,210,707 to Schroth (hereinafter "Schroth").

Claims 44, 45, 58, 59, 67, and 68 stand rejected under 35 USC § 103(a) as being unpatentable over Filley in view of U.S. Patent Publication No. 2003/0148693 to Erb, Jr. et al. (hereinafter "Erb").

ARGUMENT

37 C.F.R. § 41.37(c)(1)(vii)

I. Rejection of Claims 38, 39, 42, 46-49, 52, 53, 56, 57, 60, 61, 65, 66, 69-71, 74, and 76-87 as Being Anticipated By Filley

A. Independent Claim 38

Independent claim 38 recites, among other features,

a frame formed from a plurality of frame portions; and a shell formed from a plurality of abutting armored panels and each of the abutting armored panels formed of a single piece and forming at least a portion of the interior and exterior surface of the modular structure; each of the frame portions being secured to at least one of the armored panels to form discrete units, the units being arranged to form the modular structure in a first configuration, the first configuration including a central unit and a plurality of outer units, the outer units being removably connected to the central unit and protruding from the central unit, at least two of the outer units being substantially perpendicular to each other...

Filley fails to teach or suggest the features of claim 38.

Filley describes an assembly formed of pressure vessels having cylindrical side walls and end portions that cover the end surfaces of the pressure vessel. *See* abstract. However, Filley fails to teach or suggest the units being arranged to form the modular structure in a first configuration, the first configuration including a central unit and a plurality of outer units, the outer units being removably connected to the central unit and protruding from the central unit, at least two of the outer units being substantially perpendicular to each other. As clearly shown at least in FIG. 10 of the instant application, at least two outer units being perpendicular includes the units being arranged substantially at a 90 degree angle to each other. The Final Office Action asserts that FIGS. 4 and 7 of Filley illustrate these features. Appellant respectfully disagrees. At most, Filley describes one unit arranged on a side of another unit. *See* FIG. 4. As clearly shown in FIGS. 7, 8A, etc. of Filley, the units are clearly not arranged at right angles to each other. In fact, the six-sided arrangement of the modules shown in Filley would render it nearly impossible to provide at least two units substantially perpendicular to each other. FIG. 8A of Filley, as reproduced below, clearly illustrates this feature.

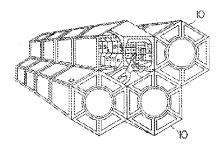
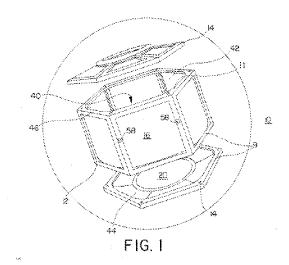


FIG. 8A

Further, Filley clearly fails to teach or suggest a central unit and *at least two units* being substantially perpendicular to each other, as recited in claim 38. At most Filley illustrates two units in a perpendicular arrangement. However, this two unit configuration clearly does not constitute a central unit and at least two units being substantially perpendicular to each other.

Further, the Final Office Action asserts, at p. 2, that Filley describes a shell formed from a plurality of *abutting* armored panels. Applicants respectfully disagree. As clearly shown throughout the figures of Filley, and as shown below in FIG. 1 of Filley, the panels 42 are separated by extensions of frame 9. *See* FIG. 1. At most Filley describes sidewalls formed of "six interconnected side panels." Col. 4, lines 60-62.



For at least these reasons, Appellant submits that independent claim 38 is allowable over Filley.

B. Dependent Claim 46

Dependent claim 46 depends from claim 38 and is allowable for at least the same reasons as its base claim and further in view of the additional novel and non-obvious features recited therein. For instance, claim 46 recites, among other features, wherein at least one of the units is hinged to form an entry point of the modular structure. The Final Office Action asserts, at p. 3, that the access port of Filley constitutes a unit as recited in claim 46. Appellants respectfully disagree. Even assuming, without conceding, that the access port of Filley does have a hinged connection, there is no teaching or suggestion of the access port door being a unit as recited in claims 46 (and claim 38). Thus, Appellant respectfully submits that claim 46 is allowable for at least this additional reason.

C. Dependent Claim 76

Dependent claim 76 depends from claim 38 and is allowable for at least the same reasons as its base claim and further in view of the additional novel and non-obvious features recited therein. For instance, claim 76 recites, among other features, wherein the first configuration is a cross shape. The Final Office Action merely states "Filley discloses wherein the modular structure is capable of being formed into a cross shape (see disclosure)." *See* p. 7. Appellant has not found anything in the description or figures of Filley that teaches or suggests a modular structure that is cross shaped. Even if Filley were to describe a modular structure "capable" of being formed into a cross shape, which Appellant does not concede, that does not establish anticipation. Unless Filley describes the claimed feature (expressly or inherently), 35 U.S.C. § 102(b) is not satisfied. The Examiner's blanket reference to the Filley "Disclosure" points to no teaching of the the first configuration being a cross shape, as recited in claim 76. Accordingly, Appellant respectfully submits that claim 76 is allowable for at least this additional reason.

D. Dependent Claims 77 and 78

Dependent claims 77 and 78 depend from claim 38 and are allowable for at least the same reasons as their base claims and further in view of the additional novel and non-obvious features recited therein. For instance, claim 77 recites, among other features, wherein the central unit is a command center. Claim 78 recites, among other features, wherein at least one of the plurality of outer units is a medical center and wherein at least another of the plurality of outer units is a

telecommunications center. The Final Office Action asserts, at p. 7, that these are statements of intended use. Appellant respectfully disagrees. The central unit being a command center and outer units being medical centers and/or telecommunications centers are structural features of the units. For instance, for a unit to be telecommunications center the unit may include fixtures for mounting telecommunications equipment. *See* Specification at p. 16. There is no teaching or suggestion in Filley of a central unit being a command center and at least one of the plurality of outer units being a medical center and at least another of the plurality of outer units being a telecommunications center. Accordingly, Appellant respectfully submits that claims 77 and 78 are allowable over Filley for at least this additional reason.

E. Dependent Claims 39, 42, 46-49, and 79

Dependent claims 39, 42, 46-49, and 79 depend from claim 38 and are allowable for at least the same reasons as their base claims and further in view of the novel and non-obvious features recited therein.

F. Independent Claim 52

Independent claim 52 recites, among other features, a modular structure for receiving and transporting individuals or equipment, comprising "a frame formed from a plurality of <u>tubular</u> frame portions, wherein the tubular frame portions are discrete and separable." (Emphasis added). Filley fails to teach or suggest the features of claim 52. The frame portion of Filley is, in fact, flat-surfaced not tubular, as recited in claim 52. Filley clearly states, at column 7, lines 46-50, that the "flat-surfaced framework can also serve as attachment points ...for debris shielding and externally mounted hardware." These flat-surfaced frame portions are clearly shown in the figures of Filley and, in particular, FIG. 1.

Claim 52 further recites, among other features, the modular structure including a first unit and a plurality of second units, the second units being removably connected to the first unit and protruding from the first unit, at least two of the second units being substantially perpendicular to each other. As discussed above with respect to claim 38 (Section A), Filley fails to teach or suggest a first unit with a plurality of second units protruding from the first unit, at least two of the second units being substantially perpendicular to each other.

Further, claim 52 recites, among other features, a shell formed from a plurality of abutting armored panels. As discussed above with respect to claim 38, Filley fails to teach or suggest abutting armored panels. Instead, the panels of Filley are interconnected and have frame portions extending between the panels. *See* FIG. 1.

Claim 52 further recites, among other features, at least one of the units having a hinged configuration to form an entry point of the modular structure, the entry point forming an opening in the modular structure that encompasses substantially all of the first end area. The Final Office Action asserts that element 20 in FIG. 1 constitutes this feature. *See* p. 5. Appellant respectfully disagrees. The circular access portion (element 20) clearly does not constitute a unit, as recited in claim 52. Further, even assuming, without conceding, that the access portion 20 does constitute a unit, there is no teaching or suggestion of it having a hinged configuration. Further still, the circular access port 20 clearly does not encompass substantially all of the first end area, as recited in claim 52.

For at least these reasons Appellant respectfully submits that claim 52 is patentably distinct from Filley.

G. Dependent Claims 81 and 82

Dependent claims 81 and 82 depend from claim 52 and are allowable for at least the same reasons as their base claims, and further in view of the additional novel and non-obvious features recited therein. For instance, claim 81 recites, among other features, wherein the first unit is a command center and claim 82 recites, among other features, wherein at least one of the second units of the plurality of second units is a medical center and at least another of the second units is a telecommunications center. As discussed above with respect to claims 77 and 78 (Section D), there is no teaching or suggestion in Filley of the first unit and second units as recited in claims 81 and 82. Accordingly, Appellant respectfully submits that claims 81 and 82 are allowable for at least this additional reason.

H. Dependent Claim 83

Dependent claim 83 depends from claim 52 and is allowable for at least the same reasons as its base claim and further in view of the additional novel and non-obvious features recited

therein. For instance, claim 83 recites, among other features, wherein the modular structure is cross shaped. As discussed above in Section C, there is no teaching or suggestion in Filley of the assembly of Filley being cross shaped. Thus, Appellant submits that claim 83 is allowable over Filley for at least this additional reason.

I. Dependent Claims 53, 56, 57, 60, 61, 80, and 84

Dependent claims 53, 56, 57, 60, 61, 80, and 84 depend from claim 52 and are allowable for at least the same reasons as their base claims.

J. Independent Claim 74

Claim 74 recites, among other features, a first modular section being a center unit and second and third modular sections being removably connected to the center unit and protruding outward from the center unit, the second and third sections being substantially perpendicular to each other. As discussed above with respect to claim 38 (Section A), there is no teaching or suggestion in Filley of second and third modular sections as recited in claim 74 being substantially perpendicular to each other. Further, there is no teaching or suggestion in Filley of the modular structure as recited in claim 74. FIG. 10 of the instant application illustrates the modular structure arrangement recited having a central unit and second and third modular sections (element 10). Nowhere does Filley teach or suggest such a structure. Accordingly, Appellant respectfully submits that claim 74 is allowable over Filley.

K. Dependent Claims 85 and 86

Dependent Claims 85 and 86 depend from claim 74 and are allowable for at least the same reasons as their base claims and further in view of the additional novel and non-obvious features recited therein. For instance, claim 85 recites, among other features, wherein the first modular section is a command center, and claim 86 recites, among other features, wherein the second modular section is a medical center and the third modular section is a telecommunications center. As discussed above, there is no teaching or suggestion in Filley of the first second and third modular sections as recited in claims 85 and 86. Thus, claims 85 and 86 are allowable over Filley for at least this additional reason.

L. Dependent Claim 87

Dependent claim 87 depends from claim 74 and is allowable for at least the same reason as its base claim and further in view of the additional novel and non-obvious features recited therein. For instance, claim 87 recites, among other features, wherein the modular structure is cross shaped. As discussed above, there is no teaching or suggestion in Filley of the assembly of Filley being cross shaped. Thus, Appellant submits that claim 87 is allowable over Filley for at least this additional reason.

M. Dependent Claims 65, 66, and 69-71

Dependent claims 65, 66, and 69-71 depend from claim 74 and are allowable for at least the same reasons as discussed above with respect to claim 74.

II. Rejection of Claims 40 and 41 Based on Filley in View of Schroth

Claims 40 and 41 depend from claim 38. These claims are allowable over the cited combination of references for at least the same reason as their respective base claims. The addition of Schroth fails to cure the deficiencies of Filley with respect to claim 38. Further, the Office fails to establish a *prima facie* rejection of the claims, because the Office does not provide a well articulated reason why someone of ordinary skill in the art would combine the cited references, as required by *KSR Int'l Co. v. Teleflex Inc.*, 127 S.Ct. 1727 (2007). For instance, the Final Office Action merely states that it would have been obvious to secure the seats of Schroth in a modular structure. *See* Final Office Action at p. 8. However, the Office fails to identify why it would have been obvious to secure helicopter seats, as describes in Schroth, in a modular space station, as described in Filley.

The Office instead has over-simplified the obviousness inquiry under *KSR* merely by reciting the advantages of the present invention, whereas *KSR* requires that analysis regarding interrelated teachings of multiple patents, the effects of demands known to the design community or present in the marketplace, and the background knowledge possessed by a person having ordinary skill in the art be made *explicit* in the record in order to determine whether there was an apparent reason to combine the known elements in the claimed fashion. *KSR*, slip op. at 14 (emphasis added). Indeed, rejections on obviousness grounds cannot be sustained by mere conclusory statements—instead, there must be some articulated reasoning with some rational

underpinning to support the legal conclusion of obviousness. KSR, slip op. at 14 (citing *In re Kahn*, 441 F. 3d 977, 988 (Fed. Cir. 2006)).

Accordingly, Appellant requests withdrawal of these rejections.

III. Rejection of Claims 64 Based on Filley in View of Schroth

Claims 64 depends from claim 74 and is allowable over the cited combination of references for at least the same reason as its respective base claim. As discussed above, the addition of Schroth fails to cure the deficiencies of Filley with respect to claim 74. Accordingly, Appellant requests withdrawal of this rejection.

IV. Rejection of Claims 54 and 55 Based on Filley in View of Schroth

Claims 54 and 55 depend from claim 52. These claims are allowable over the cited combination of references for at least the same reason as their respective base claims. As discussed above, the addition of Schroth fails to cure the deficiencies of Filley with respect to claim 52. Accordingly, Appellant requests withdrawal of these rejections.

V. Rejection of Claims 44 and 45 Based on Filley in View of Erb

Claims 44 and 45 depend from claim 38 and are allowable over the cited combination of references for at least the same reason as their respective base claims. The addition of Erb fails to cure the deficiencies of Filley with respect to claim 38. Accordingly, Appellant requests withdrawal of these rejections.

VI. Rejection of Claims 58 and 59 Based on Filley in View of Erb

Claims 58 and 59 depend from claim 52 and are allowable over the cited combination of references for at least the same reasons as their respective base claims. The addition of Erb fails to cure the deficiencies of Filley with respect to claim 52. Accordingly, Appellant requests withdrawal of these rejections.

VII. Rejection of Claims 67 and 68 Based on Filley in View of Erb

Claims 67 and 68 depend from claim 74 and are allowable over the cited combination of references for at least the same reason as their respective base claims. The addition of Erb fails to cure the deficiencies of Filley with respect to claim 74. Accordingly, Appellant requests

withdrawal of these rejections.

CONCLUSION

For all of the foregoing reasons, Appellant respectfully submits that the final rejection of claims 38-42, 44-49, 52-61, 64-71, 74, and 76-87 is improper and should be reversed.

Respectfully submitted,

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<u>CLAIMS APPENDIX</u> 37 C.F.R. § 41.37(c)(1)(viii)

Claims involved in the appeal:

Claim 38. (Previously Presented) A modular structure for receiving and transporting individuals

or equipment, comprising:

a frame formed from a plurality of frame portions; and

a shell formed from a plurality of abutting armored panels and each of the abutting

armored panels formed of a single piece and forming at least a portion of the interior and

exterior surface of the modular structure;

each of the frame portions being secured to at least one of the armored panels to form discrete

units, the units being arranged to form the modular structure in a first configuration, the first

configuration including a central unit and a plurality of outer units, the outer units being

removably connected to the central unit and protruding from the central unit, at least two of the

outer units being substantially perpendicular to each other, and the central and outer units being

non-destructively separable to disassemble the modular structure, wherein the units are

configured and aligned to be interchangeable with units from other modular structures in at least

a second configuration, wherein the first configuration is different from the second configuration.

Claim 39. (Previously Presented) The modular structure recited in claim 38, wherein the

modular structure comprises means for joining with another modular structure to form a larger

modular structure.

Claim 40. (Previously Presented) The modular structure recited in claim 38, further comprising

seats secured within the modular structure.

Claim 41. (Previously Presented) The modular structure recited in claim 40, wherein the seats

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are floor mounted helicopter seats having a four point harness.

Claim 42. (Previously Presented) The modular structure recited in claim 38, wherein a portion

of the armored panels are configured to be removed from an interior of the modular structure to

form ports.

Claim 44. (Previously Presented) The modular structure recited in claim 38, wherein the

armored panels comprise a fiber-reinforced polymer.

Claim 45. (Previously Presented) The modular structure recited in claim 44, wherein the fiber

of the fiber-reinforced polymer is a para-aramid fiber.

Claim 46. (Previously Presented) The modular structure recited in claim 38, wherein at least

one of the units is hinged to form an entry point of the modular structure.

Claim 47. (Previously Presented) The modular structure recited in claim 38, wherein at least

one of the units is configured to be removed from the modular structure to form a port in a side

portion of the modular structure.

Claim 48. (Previously Presented) The modular structure recited in claim 38, wherein at least

one of the units includes an attachment area for mounting weaponry.

Claim 49. (Previously Presented) The modular structure recited in claim 38, wherein at least

one of the units includes an attachment area for mounting a crane.

Claim 52. (Previously Presented) A modular structure for receiving and transporting individuals

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or equipment, comprising:

a frame formed from a plurality of tubular frame portions, wherein the tubular frame

portions are discrete and separable; and

a shell formed from a plurality of abutting armored panels, the frame and shell configured

to form an elongate shape with a first end area and an opposite second end area, each of the

abutting armored panels formed of a single piece and forming at least a portion of an interior

surface of the modular structure and an exterior surface of the modular structure having no void

between the interior surface and exterior surface,

each of the frame portions being secured to at least one of the armored panels to form discrete

units, the units being arranged to form the modular structure, the modular structure including a

first unit and a plurality of second units, the second units being removably connected to the first

unit and protruding from the first unit, at least two of the second units being substantially

perpendicular to each other, and the first and second units being configured to be separated to

disassemble the modular structure, at least one of the units having a hinged configuration to form

an entry point of the modular structure, the entry point forming an opening in the modular

structure that encompasses substantially all of the first end area.

Claim 53. (Previously Presented) The modular structure recited in claim 52, wherein the

modular structure comprises means for joining with another modular structure to form a larger

modular structure.

Claim 54. (Previously Presented) The modular structure recited in claim 52, further comprising

seats secured within the modular structure.

Claim 55. (Previously Presented) The modular structure recited in claim 54, wherein the seats

are floor mounted helicopter seats having a four point harness.

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Claim 56. (Previously Presented) The modular structure recited in claim 52, wherein a portion of the armored panels are configured to be removed from an interior of the modular structure to

form ports.

Claim 57. (Previously Presented) The modular structure recited in claim 52, wherein the units

are configured to be removed from the modular structure and joinable with another modular

structure.

Claim 58. (Previously Presented) The modular structure recited in claim 52, wherein the

armored panel comprises a fiber-reinforced polymer.

Claim 59. (Previously Presented) The modular structure recited in claim 58, wherein the fiber

of the fiber-reinforced polymer is a para-aramid fiber.

Claim 60. (Previously Presented) The modular structure recited in claim 52, wherein at least

one of the units is configured to be removed from the modular structure to form a port in a side

portion of the modular structure.

Claim 61. (Previously Presented) The modular structure recited in claim 52, wherein at least

one of the units includes an attachment area for mounting at least one of weaponry and a crane.

Claim 64. (Previously Presented) The modular structure recited in claim 74, further comprising

seats secured within at least one of the first and second modular sections.

Claim 65. (Previously Presented) The modular structure recited in claim 74, wherein a portion

of the armored panels are removable from an interior of the modular structure to form ports.

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Claim 66. (Previously Presented) The modular structure recited in claim 74, wherein the modular sections are removable from the modular structure and configured to be joined with at least a third modular section to form a second modular structure.

Claim 67. (Previously Presented) The modular structure recited in claim 74, wherein the armored panel comprises a fiber-reinforced polymer.

Claim 68. (Previously Presented) The modular structure recited in claim 67, wherein the fiber of the fiber-reinforced polymer is a para-aramid fiber.

Claim 69. (Previously Presented) The modular structure recited in claim 74, wherein the armored panels abut each other.

Claim 70. (Previously Presented) The modular structure recited in claim 74, wherein at least a portion of one of the modular sections is configured to be removed from the modular structure to form a port in a side portion of the modular structure.

Claim 71. (Previously Presented) The modular structure recited in claim 74, wherein at least one of the modular sections includes an attachment area for mounting at least one of weaponry and a crane.

Claim 74. (Previously Presented) A modular structure for receiving and transporting individuals or equipment, comprising:

- a first frame formed from a plurality of frame portions;
- a first shell formed from a plurality of armored panels;

the first frame, extending around the exterior of the first shell, and first shell forming a first modular section having a bottom surface, a top surface and at least three sides, each of the armored panels being formed of a single panel forming the first shell and forming at least a portion of the interior surface and exterior surface of the first modular section having no void between the interior surface and exterior surface, the first modular section being a center unit;

first coupling means arranged on the first modular section and configured for joining the first modular section with at least one other modular section;

a second frame formed from a plurality of frame portions;

a second shell formed from a plurality of armored panels;

the second frame, extending around the exterior of the second shell, and second shell forming a second modular section having a bottom surface, a top surface and at least three sides, each of the armored panels being formed of a single panel forming the second shell and forming at least a portion of the interior and exterior surface of the second modular section having no void between the interior surface and the exterior surface; and

second coupling means arranged on the second modular section and configured for joining the second modular section to at least the first modular section;

a third frame formed from a plurality of frame portions;

a third shell formed from a plurality of armored panels;

the third frame, extending around the exterior of the third shell, and third shell forming a third modular section having a bottom surface, a top surface and at least three sides, each of the armored panels being formed of a single panel forming the first shell and forming at least a portion of the interior surface and exterior surface of the first modular section having no void between the interior surface and exterior surface;

third coupling means arranged on the third modular section and configured for joining the third modular section with at least one other modular section;

the second and third modular sections being removably connected to the center unit and protruding outward from the center unit, the second and third sections being substantially

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perpendicular to each other.

Claim 76. (Previously Presented) The modular structure of claim 38, wherein the first configuration is a cross shape.

Claim 77. (Previously Presented) The modular structure of claim 38, wherein the central unit is a command center.

Claim 78. (Previously Presented) The modular structure of claim 38, wherein at least one of the plurality of outer units is a medical center and wherein at least another of the plurality of outer units is a telecommunications center.

Claim 79. (Previously Presented) The modular structure of claim 38, wherein the modular structure includes at least four outer units.

Claim 80. (Previously Presented) The modular structure of claim 52, wherein the first unit is a central unit.

Claim 81. (Previously Presented) The modular structure of claim 52, wherein the first unit is a command center.

Claim 82. (Previously Presented) The modular structure of claim 52, wherein at least one of the second units of the plurality of second units is a medical center and at least another of the second units is a telecommunications center.

Claim 83. (Previously Presented) The modular structure of claim 52, wherein the modular

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structure is cross shaped.

Claim 84. (Previously Presented) The modular structure of claim 52, wherein the plurality of

second units includes at least four units.

Claim 85. (Previously Presented) The modular structure of claim 74, wherein the first

modular section is a command center.

Claim 86. (Previously Presented) The modular structure of claim 74, wherein the second

modular section is a medical center and the third modular section is a telecommunications center.

Claim 87. (Previously Presented) The modular structure of claim 74, wherein the modular

structure is cross shaped.

EVIDENCE APPENDIX 37 C.F.R. § 41.37(c)(1)(ix)

NONE.

RELATED PROCEEDINGS APPENDIX 37 C.F.R. § 41.37(c)(1)(x)

NONE.